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TECHNICAL NOTES

Barriers and Opportunities for the Development of Small-scale Forest Enterprises in Europe

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Abstract The article introduces the background and summarises main research findings of the research articles in this special issue. The focus is on the key issues relevant for forest-based entrepreneurship development in small-scale forestry in relation to both wood and non-wood forest products and services (NWFP&S). The article draws special attention to changing forest ownership, changing owners' motives and values, and the evolving role of forest owners' associations in Europe. The paper draws attention to the finding that many small-scale forest owners do not treat their forest as an income-generating asset. The ownership of the forests may be more important as symbolic capital than as a source of income. This is quite opposite to the traditional wood production model that for instance most of the Forest Owners Association's still follow. In relation to NWFP&S, the taxonomy and indicators for NWFP&S are discussed and some conclusions from studies on forest recreation innovation and NWFP&S marketing are presented. The NWFP&S sector is traditionally product-oriented, which is strategically peculiar because the long distances from rural production areas to the customers would suggest highest orientation on marketing. Also surprising is the low level of segmentation in the sector.

Keywords Entrepreneurship · Rural development · Non-wood forest products · Recreation · Policy

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The Role of Enterprises in Supporting Rural Development

Over the last 50 years major demographic and economic changes have affected rural Europe. At the same time as the population of Europe has been ageing, there have been major public sector reforms that have limited the role of the welfare state and created markets or quasi-markets for many former public services. There has been a rise of a neo-liberal economic agenda which has extolled the virtues of less state intervention and more private sector activity and led to advocacy for a global agreement towards freer trade in a wide range of products (Anderson et al. 2001).

These changes have had profound repercussions on farmers in the EU who have been working behind high levels of protection. The coupled effects of a neo-liberal economic agenda—pursued with different degrees of vigour in different European countries—and rapid development of new technology have created a tendency towards globalisation. At the same time as European countries have struggled to adapt to major geopolitical changes and globalisation and a struggle to remain economically competitive, they have had to adapt to major demographic changes (Pierson 2001) and other changes that place great pressure on already tight public sector budgets (Gershon 2004).

As the pressures of globalisation have eroded the rather well developed welfare state in Europe, so it has been argued that a more entrepreneurial set of attitudes will be needed to maintain competitiveness. Further, many of the arenas occupied by the state have been partially or wholly privatised and a more entrepreneurial perspective is widely promoted by public agencies and governments of various political orientations. As well as markets taking over a proportion of health care, transport, the care of the elderly, economic instruments are being applied to more complex areas where market failure exists, but where a convincing case has been made that market instruments are more efficient in delivering incentives for positive externalities and disincentives for negative externalities, than are regulatory instruments. Further, as more effective markets develop for carbon sequestration, new values could drive a renewed interest in forestry that has long looked financially rather marginal to many rural forest owners (Lien et al. 2006).

These issues have major resonance in rural areas. The rhetoric of support has shifted dramatically from a fortress Europe extolling the virtues of self-sufficiency in food to a rural Europe delivering multifunctional benefits, including many products and public goods which are seen as co-products of the predominant farm and forest structures of family holdings. Alongside the policy changes, the pressure on agriculture and other primary industries has required a search for new market opportunities often connected to leisure demands. Those who own the rural resources may be geographically well placed to offer these new services but may lack the commercial skills and entrepreneurial values to initiate them (Slee 1989).

Rural Europe is a dynamic socio-economic environment, with declining population in many remote rural districts but by no means all, and major increases in population in the accessible countryside. It is in these areas of accessible countryside that the opportunities for service-based enterprises are most strongly evident. More remote areas can also engage in these markets through tourism, although the production function of land may still provide sources for economic

growth and entrepreneurship. Meeting the demands of the urban and semi-urban population is a key challenge to the economic viability of all rural areas (OECD 2006).

Rural areas have multiple and ambivalent roles in developed western economies. Undoubtedly, there will be a less uniform production-centred ethos driving rural land managers' behaviour in the future, partly because of the desire of many people to own rural land (especially in attractive countryside within commuting distance from major cities) and partly because of the new service-related opportunities that these new rural residents bring with them (OECD 2006).

The earlier role of rural areas as providers of primary materials have been added to by new roles as living and tourism and recreation space, but these new roles have created a highly differentiated rural economy. Those areas that have attractive countryside and are close to urban areas have often been socially and economically transformed by commuting and leisure use. Those areas further away with attractive environments have often emerged as important tourist destinations and as beneficiaries from in-migration for lifestyle reasons (Jedrej and Nuttall 1995) Paradoxically, the areas with least intensive traditional land uses have often been more advantaged than disadvantaged by this fact, because landscape attractiveness is often enhanced by the presence of low-intensity land use and substantial areas of semi-natural habitat. Some of the rural areas most challenged in contemporary Western Europe are those dominated by primary industries which have been in structural decline for several decades.

The problems of rural adjustment are exacerbated by neo-liberal economic policies and the move towards free trade. A more entrepreneurial rural economy is not only sought by policy-makers, but is also a necessary survival strategy for rural businesses, which have historically been heavily supported by public subsidy (OECD 2006). The recent migrants have often brought new values and new wealth to rural areas, but as well as increasing purchasing power there may be a downside in their desire to retain an attractive countryside for recreation, untrammelled by the visible signs of industrial activity in primary or other sectors. Clearly, a sound balance between multiple uses of forests is needed.

Scope and Aim of the Special Issue

Forestry entrepreneurs are typically private forest owners who base their businesses on the production of wood and other forest products and provision of various environmental or recreational services (Lunnan et al. 2005). However, the entrepreneurs are only one subset of forest owners, and other owners are often motivated by non-business aims (Kvarda 2004). Although the provision of environmental or recreational services is rarely an explicit objective for small-scale forest owners, their forests can still support entrepreneurship in tourism and recreation.

Typical customers for forest owners are timber purchasing companies, wood and non-wood processing companies, merchants, and end-customers in situations where forest goods or services are directly sold. Other forest-based companies in the whole

forest, wood, non-wood, services and consumer chains include timber harvesting companies, providers of a variety of services, and a number of private (or semi-private) institutions supporting the forest-based value chains.

It is apparent that in Europe the role of entrepreneurs will grow in the forest sector in the future. But how prepared is the sector for utilising the opportunities of entrepreneurship to support rural development and enhance the well-being of rural people?

This question was examined in COST Action[1] E30 (COST E30 2007) entitled *Economic integration of urban consumers' demand and rural forestry production*, which was implemented between September 2002 and 2006. The aim of the Action was to gain a better understanding of the problems and possible solutions concerning the lack of forest-based entrepreneurship in small-scale forestry, wood processing and non-wood forest products and services (NWFP&S). It was considered that enterprise development could be an important contributor to higher employment and income in rural areas.

In the first phase of the Action, harmonised information was collected on the state-of-the-art of small-scale forestry, wood processing and NWFP&S in 19 European countries (Jáger 2005). The country studies and the experiences of the participating researchers were used to determine the key issues for further analysis in the second part of the Action. The results of these analyses were initially published in proceedings of the Action final conference (Niskanen 2006), and some of the papers have been extensively revised and included in this special issue of *Small-scale Forestry*. The aim of the special issue is to identify barriers and opportunities to enterprise development in small-scale forestry and NWFP&S in Europe.

Sources of Information

Concerning the studies on relating most directly small-scale forestry in this special issue—viz. forest owners attitudes and values (Ní Dubháin et al. 2007), property rights (Bouriaud 2007)—the most important sources of information were the country profiles from COST Action E30 phase one (Jáger 2005), and the experiences of participating researchers. These sources of information were used to focus especially on the following three questions:

- What are the factors affecting the competitiveness of forest wood, non-wood, services and consumer chain?
- What are the main barriers and prospects to entrepreneurship?
- What kind of problems and opportunities exist in enterprise development?

Concerning the studies on NWFP&S at this special issue—viz. taxonomy (Mantau et al. 2007), indicators (Seeland and Staniszevski 2007), innovations (Weiss et al. 2007), marketing (Pettenella et al. 2007) and a country case from Switzerland

[1] An 'Action' refers here to separate COST projects.

(Seeland et al. 2007)—the same categories of information were used and similar research questions asked as above. The COST E30 country profiles included also a number of case studies which generated further information on property rights, innovations and marketing (Jáger 2005). The results of the studies on small-scale forestry and NWFP&S are presented in the following sections of this paper.

Production of Market Products and Public Goods in Small-Scale Forestry

At EU 25 level, including the countries that had joined the Union by May 2004, there are about 15 M small-scale forestry holdings covering more than 37 M ha of land. The average size of holding varies greatly from region to region, with forest holdings of 100 ha common in some parts of northern and western Europe but less frequent in central Europe and almost wholly absent in eastern Europe. In this context 'small-scale forestry' is considered as synonymous with non-industrial private forestry (NIPF). As a category, NIPF normally excludes all public sector forests, all industrial forests owned or leased by processors and all forests held by charitable organisations and NGOs. 'Small' is less an objective category and more a set of culturally conditioned perceptions, in that a 10 ha forest holding might be deemed large by local standards in Hungary but small if viewed through Nordic eyes.

In general, the small size of European private forest holdings militates against their economic viability in a world in which globalised forest processing firms require large volumes of wood raw material. Many forests are managed as part-time enterprises and create insufficient income to support a household (Rametsteiner et al. 2005). In addition, in some parts of south-eastern Europe, forests provide an important subsistence function, particularly with regard to woodfuel, but also in relation to income derived from NWFP (e.g. from sale of cork, nuts and mushrooms).

On superficial examination, the forest sector occupies a contrasting position to the farm sector, in that it is lightly subsidised, at least in terms of market subsidies. However, a highly variable raft of policy measures exists from country to country which to differing degrees in different places offer incentives for new planting (mostly on farmland), for forest management and for public good delivery. The result is that the private forest owners operate in a substantially regulated policy environment.

Ultimately, the scope for entrepreneurial development in the small-scale forest sector is conditioned by both the demand conditions for forest products and the values and dispositions of forest owners. In general, growth in the demand in western European markets for wood-based products has been strong in the last few years, after a slackening of demand in the early 2000s, but any strengthening of demand must overcome the substantial diseconomies of small size and the weakly entrepreneurial attitudes of many forest owners (Rametsteiner et al. 2005).

Seven principal drivers of demand for forest products and services can be identified: population, income, forest accessibility, environmental factors, societal

factors, changes in human needs, and changes in industrial demand for forest products. Several of these demand drivers favour demand for non-timber forest products over that for timber products, and can be expected to create potential tension between a more entrepreneurially focussed wood sector and a more public good oriented non-wood sector in the future (Mitchell-Banks 2006).

The Importance of Ownership and Property Rights in Small-Scale Forestry

Forest ownership is an entitlement to own real estate and it is characterised by three main rights: use, possession and alienation. Property rights are rules governing the use of the forest resources. Property rights with respect to forests vary substantially from one country to another in Europe. The nature of these property rights frames the opportunities for new product developments. A small-scale forest owner may have property rights over the trees, although those are mediated by the state, sometimes quite profoundly, normally through the prerequisite that felling is licensed or approved by the state or by some other competent authority. Thus the forest owner owns the trees but has no right to fell trees according to their own wishes, without reference to public authorities. In our experience, it appears that there are situations when the state imposes post-felling obligations, such as replanting, without a significant financial compensation, that the owner may be deterred from felling because of a lock-in to costly post-felling management actions. In many countries there is a commonly accepted idea that the forest owner has the duty to maintain the forest without any compensation (Aenishaenslin et al. 2007).

Small-scale forestry is often associated with high cost of enforcement of property rights (Bouriaud and Schmithüsen 2005). This is reputed to be especially the case where the forest is distant from the residence of the owner and pilfering of both wood and non-wood products is widespread to help meet poor people's subsistence needs. The issue of small scale of ownership is often compounded by asymmetric information problems, whereby sellers do not know the value of the product. In addition, the demands on forests for non-timber products—e.g. berries and fungi—are often associated with problems of common pool resources (Mendelsohn 1994), as are the more recently articulated values associated with carbon storage, biodiversity and informal recreation (Merlo and Croitoru 2005).

A variety of means can be used to address these problems. Regulatory and incentive means can be used as well as stronger enforcement of property rights. Co-operative management can address some of the problems of small scale, and certainly has capacity to reduce information asymmetry problems (Mendes 2006).

Undoubtedly, there are barriers to small-scale forestry development arising from improperly defined property or ownership rights. These are analysed in the paper of Bouriaud (2007) in this special issue.

Goals and Attitudes of Private Forest Owners

As in agriculture so in forestry, the delivery of environmental services has become a more important part of multifunctionality in recent decades. Because of the public

good character of many environmental goods and services, the private forest owners' room for manoeuvre to develop new commercial opportunities may be circumscribed to ensure delivery of these public goods, with or without compensation.

Often the small-scale forest owner may not be treating their forests as an income-generating asset (Lien et al. 2006). The ownership of the forests may be more important as symbolic capital than as a source of income. Neighbouring forests can abut each other but be operated under wholly different management regimes, one based on active silviculture and the other experiencing total neglect. These divergent practices suggest that something other than market opportunities mediates the degree and style of forest management. Therefore, in assessing the opportunities for enterprise development in small-scale forestry a better understanding of forest owners' attitudes and values is needed.

The evidence cited above about the immigration of affluent incomers to rural areas, coupled with the existence of a large number of traditional forest owners with highly variable motivations to manage their forests for commercial and non-commercial reasons, creates a challenging seedbed for entrepreneurial activity. Although goals and values of rural land managers, including foresters, have often been the subject of academic investigation, their entrepreneurial traits have been weakly explored. The available studies on forest owners' attitudes in Europe are examined in Ní Dubháin et al. (2007) in this special issue.

Forest Owners' Associations and Managerial Services

From the country profiles of small-scale forestry in Europe (Jáger 2005), it is apparent that there exist enormous variations from country to country in the institutional structures to support NIPF. Forest owners associations (FOAs) often have an essential role in creating preconditions for entrepreneurial activity among small-scale forest owners.

FOAs have been established at varying times in different parts of Europe. They have a long history in Nordic countries and Germany and a much more recent history in other countries, including post-socialist countries in eastern and central Europe and in Ireland and parts of southern Europe. FOAs provide the principal means of overcoming the obstacles of delivering to the processing sector where small-scale forestry retains a major role in wood supply. They are likely to be less important in the economically less important, more individualistic and non-commodity-based actions relating to non-wood processing and services. However, if NWFPs are financially important to forest owners, the role of FOAs is also relevant in organising nut, mushroom and truffle processing and selling (Pettenella et al. 2007).

The role of FOAs in supporting small-scale forestry practices is analysed in the paper of Mendes et al. (2006). These authors argue that FOAs can have a vital role in supporting private forest owners to overcome the structural disadvantages that the current ownership arrangements result. One of the major challenges facing forest owners' associations is the multi-functionality of forests and the enormous diversity of owners' motivations and values. Since the forest owners have a broad spectrum of values and attitudes, the possibilities of supporting wood supply to downstream

industries may decrease in the future unless new ways are found to motivate forest owners to manage their forests.

Forest owners' associations need to embrace the growing diversity and to adopt an inclusive approach to the values that their clients represent. Also, there is a role for FOAs to encourage active learning among the forest owners (including absentee owners) to support entrepreneurial developments in both wood and non-wood supply chains.

The relationship between these observations on property rights, woodland owners' attitudes, the presence or absence of FOAs and rural development in Europe is shaped by path dependency. Property rights frame the possibilities for commercial exploitation and owners' values mediate and frame their likely courses of action. FOAs act as potentially pivotal institutions in overcoming some of the obstacles to commercial small-scale forestry.

On one hand, a traditional wood production model with owner support by means of FOAs tends to focus on addressing the weaknesses of the private forest owners in delivering wood or non-wood raw material into viable supply chains which contribute to rural development. FOAs thus emerge as trusted intermediaries between small-scale forest owners and the wood processors, nurturing a culture of productive woodland management.

On the other hand, a more broadly based model of multifunctional forestry values, evidenced especially strongly in more affluent, densely populated countries, has the capacity to contribute to the rural development through the provision of NWFP&S or highly valued green infrastructure. If affluent people choose to live in rural areas because of the green space provided by forests, the expenditures of these new rural residents may provide multiple opportunities for rural entrepreneurship. However, this development, especially important close to urban residential areas, provides entrepreneurial opportunities that are mostly external to the traditional production model of forest use and management. FOAs may have a role here but to engage effectively they need to be more accommodating of the various types of owners and their objectives.

Forest owners' objectives need to be well understood and respected, because the owners are the decision-makers at the beginning of almost all forest wood chains, and thus their behaviour cannot be ignored when developing policies in this sector. Equally important is to develop the work in forest owners' associations and similar organisations the mission of which is to support their clients' benefits and welfare, since they are in a key position to improve the engagement of forest owners with their forests. These associations should focus internally, according to their clients' objectives, not only on the facilitation of wood production but also on the provision of services related to non-timber uses of forests and evolving business opportunities in the NWFP&S sector.

The Changing Nature of Small-Scale Forestry

Over recent years, social changes have profoundly affected rural production and forestry in many respects in Europe. Earlier, forest owners used to be farmers or

rural inhabitants, but the situation has changed rapidly. Nowadays, many forest owners are employed in other sectors or they live in non-farm residences (Rametsteiner et al. 2005). A decreasing number of active farms, dissociation between agriculture and forestry in farming, and the ageing of the rural population have affected small-scale forest production in all EU countries and particularly in Western Europe. Social changes and the decreasing timber revenues have led in some cases to the abandonment of forests, non-management of forests or decreasing efforts in forest management.

Changing cultural factors have a direct impact on the attitudes of the forest owners towards the use of forests. It appears that forests have increasingly become consumption goods, symbolic capital or a low earning capital asset, and they may not be treated in many households as a normal good with potential to generate income. Strong patrimonial values of forest ownership tend to prevent the development of fluid land markets in many countries, which prevents land consolidation and the emergence of larger forest estates.

Forest owners' attitudes towards forestry and their objectives with regard to forest property are probably the most important factors affecting their management decisions. Though several typologies of forest owners' objectives and values have been published, there still exists no information on frequencies of various types of forest owners or the links between forests owners' values and objectives and their entrepreneurial attitudes (Ní Dubháin et al. 2007). This is surprising because the attitudes and decisions of forest owners impact considerably on the opportunities of many forest-based downstream industries. For example, the decisions of forest owners to manage their own resources and the style of management they adopt have profound repercussions for downstream processors in wood-working industries. Consumption-oriented forest owners can withhold wood supply as can those forest owners who promote biodiversity or recreation interests thus undermining downstream opportunities for entrepreneurship in wood industries.

One factor of compelling importance of small-scale forest owners in relation to downstream wood industries is their ability to engage feasibly in commercial wood production on their holding (Helles and Thorsen 2005). This opportunity is mostly shaped by the size of the holding. When the forest holding is too small, the prospects for commercially viable engagement with the mainstream wood-processing sector is negligible, especially in the absence of FOA structures capable of coordinating operations.

Though it is evident that NIPF will survive as a form of forest ownership, there are some uncertainties. The evolving nature of forest owners' goals and values will necessarily change alongside evolving understanding of how NIPF can best contribute to sustainable development.

One major opportunity to forest owners is the growing bioenergy market in Europe. Whilst the traditional wood supply chain might lose out, society at large might be better off as a result of the energy produced and the public good value of the climate change averted. The scope for biomass entrepreneurs seems considerable, but such opportunities cannot arise without policy leadership, institution building and supply chain development. If the global crisis predicates carbon storage as a market-driven function, it would not be wholly improbable even to

anticipate a reduction in the felled volume of timber for sawlog, wood product or paper production, alongside the emergence of a more entrepreneurial approach to the management of forest resources for fuel.

Europe is at an important point in the development of forests. The demands on forests will almost certainly change and there is a need for creative adaptive institutions and nurturing a cadre of creative forest owners to meet these changing demands. Some will take an entrepreneurial route towards niche products, some will continue to meet the demand for commodity timber in the wood supply chain, and others will engage more fully with public goods, the composition of which will vary from place to place. The need for creative and adaptable forest owners and institutions has never been greater.

Taxonomy of Non-wood Forest Products and Services

The FAO (2005) defined NWFP as 'products of biological origin other than wood, derived from forests, other wooded land and trees outside forests'. The FAO stated that many 'new and practically interchangeable' terms have been created: by-products of forests, minor forest products, non-timber forest products, non-wood goods and benefits, non-wood goods and services, other forest products, secondary forest products and special forest products. Similarly, many definitions have been proposed for NWFP, all covering different aspects, species and products according to the focus of work of the respective author or organisation. This lack of a clear terminology causes serious problems because it is one reason why NWFP&S markets are not transparent and why market information is not often updated or reliable.

A system of classification terms for forest products has been developed and reported by Mantau et al. (2007) in this special issue, designed to create greater scientific clarity and remove all negative connotations from forest resources giving them equal attractiveness and presenting them as a broad variety of attractive goods and services.

Three basic levels of definitions for forest products can be considered. These three levels (resource, product and user) are the basic classification scheme of Forest Goods and Services (FOGS). Each level can be subdivided into further sub-levels if this makes sense in terms of analyses or marketing.

Common Framework of Indicators for NWFP&S

In order to define a common frame for analysing NWFP&S at European level a draft matrix based on selected national indicators of NWFP&S is presented by Seeland and Staniszevski (2007) in this special issue. The purpose of defining these indicators has been a comparison as well as a classification through a country-wise assessment of a first set of indicators. This classification started with listing products which are traditionally collected or, if they are services, which are rendered by whom to whom. Traditional products were examined in detail as to whether their importance is increasing, decreasing or remaining the same. Other indicators, such as whether it is a trend product, a main product as far as quantity is concerned, or a

rare and highly valued product (e.g. truffles), and whether it is relevant for the export sector, have been defined. Services are treated separately as well as are the questions of access. The main current problems with NTFP&S have been addressed in an additional section. Legal considerations such as ownership rights and customary law have been taken into account as well as disputes and conflicts over entitlements to benefit from NWFP&S. The items and indicators in this matrix are classified according to their sheer occurrence in the respective country reports but their quantification has of necessity been left aside.

The *second set of indicators* have been selected according to the assumption that they are applicable and relevant in each of the surveyed countries. Five indicators have been chosen in order to make NWFP&S comparable:

- Significance: gives an overall assessment of whether NWFPs or NWFSs are important in the general national context of forest use.
- Monetary benefits: denote whether there is a substantial cash flow connected to the goods or services provided.
- Disputed: indicates whether goods or services are disputed among particular stakeholders or whether they are contested domains in public discourse in a country in general.
- Job relevance: provides information about whether the goods or services make up a substantial part of employment in the rural sector.
- Access for private or public use: indicates whether there are regulations for the collecting of NTFP or property rights over them.

Supporting and Impeding Factors for Innovations in Forest Recreational Services

An increasing part of the forest-based value generation is likely to come from the supply of forest-related services and not from traditional timber production. Examples of such services are ecosystem services, recreation, hunting, fishing, biodiversity conservation and cultural tourism.

The paper of Weiss et al. (2007) in this special issue focuses on forest-related recreation services as an example of new forest-related business opportunity. Cases from five European countries with differing institutional backgrounds have been analysed in order to define the role of public and private resources in the innovation process. In the countries covered, forest ownership is dominated by either public or private, and access to forest land is free to varying extents. The analysis of the case studies includes the structure of the innovation systems—i.e. public and private actors—and their roles in the innovation processes.

In most cases the involvement of both public and private players has been critical to the success of the innovation. This demonstrates a strong propensity for cross-sectoral working between forestry, tourism and economic development sectors with actors who have responsibilities from the local and regional level through to the national and international scale (horizontal integration).

Ideas for product and service innovations and impulses to develop ideas further into products and services tend to come from individual innovators' personal interests rather than from institutional actors with evidence that the institutional structures to support forestry innovation are weak (Rametsteiner and Weiss 2004). These findings suggest that there is an absence of stimuli and diffusion of new ideas among institutional actors, such as in forestry, tourism and economic development organisations.

When it comes to delivering products and services, a broader range of actors becomes critical. The cases studied indicate that knowledge and information to reduce risks of operations, finance to develop infrastructure and services, and the co-ordination and development of linkages between actors across the forestry, tourism and recreation, economic development and environmental protection sectors, as well as from local and regional municipalities are fundamental. In some instances, however, whilst forest land is utilised, products and services are delivered without any interaction with the forestry actors.

The cases studied support the view that social capital—i.e. the stock of shared meaning and trust in a given community—is a prerequisite for cooperation and organised human behaviour, including business, which are fundamental to successful innovations. Aside from social capital, the knowledge in the subject of the product or service being developed (such as guided bird-watching tours or forest pedagogy) and skills in the delivery of services or business activities (such as marketing) foster innovation processes.

The findings of the case studies are in line with the modern innovation theory which proposes that innovation is dependent not only on the system of institutions and actors, but also on their interaction abilities (Rametsteiner et al. 2005). Unfortunately, the institutional support for many NWFP&S in practice remains weak. This may be due to the high heterogeneity of these products and services which does not allow the institutions to develop and evolve, as in the case of forestry in which the institutional support is based on a rather narrow productive structure of forests. Another reason for the weak institutional support may be the relatively small single business opportunities in the NWFP&S sector that has not allowed efficient institutions to evolve. In fact, strong traditions elsewhere, as in forestry (e.g. in forest legislation or in the work of forest owners' associations) may even have limited the institutions to evolve and to provide greater support for NWFP&S sector developments.

Marketing of NWFP&S

The markets for forest-based products and services are sometimes divided into mass markets and specialised markets. As some NWFP&S are often complex, a third category of multi-product or multi-service markets for complementary NWFP&S is introduced in the paper of Pettenella et al. (2007) in this special issue.

The complementary products and services may originate from mass products and services as well as from specialised products and services. A very basic mass product with low added value and poor market value can create a successful product

when combined, e.g. with some complementary services. A good example of this is combining handicraft courses into selling the raw material collected from nature, such as moss or twigs. Complementary products may support the marketing of the inter-connected mass or specialised products.

In general, the sector of NWFP&S includes a wide variety of both products (for instance food products and handcrafts) and services (for instance recreation and funerals). It is connected with many branches of the economy and the social life, such as the food industry, education, recreation and tourism, decoration, medicine and health care, sports, and as extreme examples, art and music. Both marketable (food specialities, nature tourism packages) and non-marketable (landscape, clean air, biodiversity) products and services are supplied as NWFP&S. Different systems of property rights regulation influence the marketing potential of NWFP&S in different socio-economic contexts. Each product or service requires different approaches concerning the marketing strategy. Therefore it is extremely difficult, if not impossible, to lay down marketing rules that would apply to the whole sector.

Fundamental in all marketing is the identification of factors that create a marketing advantage and provide added value to consumers. An important tool for successful marketing of NWFP&S is the control of quality, helped by standardisation and trademarks in the case of mass products, and by certification systems in the case of specialised products. Mass products, such as fruit, Christmas trees and honey, are typically commercially produced on a large scale. Specialised products and services are well differentiated and have high added value, such as truffles and birch sap. Complementary products and services are attached to a major product or service, and are marketed according to the marketing strategies developed for the main service or product (such as berry sales marketing as a part of a nature tourism service).

It appears that in the process of SME development the whole NWFP&S sector tends to be more customer-oriented than in supplying wood products. This change requires more effort on market research to obtain precise information about customer needs and demands. Since in some cases small and micro enterprises in rural areas cannot access this information by themselves, public institutions could support this development.

To increase the possibilities of commercial success in mass product enterprises, producers need to develop greater product differentiation and move up the value chain towards more innovative specialised production. An important tool for successful mass product marketing is quality control. This leads to standardisation and trademarks of mass products and to various kinds of certification systems for both mass and specialised products. For specialised products and services, more important than standardisation are the organisational aspects for production and distribution as well as for market research and promotion.

Even though the demand for the NWFP&S is increasing, there are still many barriers for entrepreneurs and supporting institutions to overcome before the potential can be fully realized. The NWFP&S sector is traditionally product-oriented, which is strategically peculiar because the long distances from rural production areas to the customers would suggest that the highest orientation is towards marketing. Also peculiar is the low level of segmentation in the sector. To

be able to develop high quality products or services for the demanding customer groups, it would be essential to target businesses more tightly to the selected customer groups, which is even more important considering the wide range of NWPF&S existing in the markets.

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